

Last Revised: January 2000

Summary Status

Landings and Abundance Trends

Landings Data

## River Herring

by  
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The term "river herring" is applied collectively to alewife, *Alosa pseudoharengus*, and blueback herring, *Alosa aestivalis*. The coastal range of the blueback herring is from Nova Scotia to Florida; the coastal range of the alewife extends from Labrador to South Carolina. In coastal rivers where ranges overlap, fisheries for these species are typically mixed. Both species are anadromous and undertake upriver spawning migrations during spring. Alewives may live as long as 10 years and reach a length of 36 cm (14 in.). Blueback herring live for about 7 or 8 years and reach a maximum length of about 32 cm (13 in.).

Alewives spawn in spring when water temperatures are between 16° C and 19° C; blueback herring spawn later in spring, when water temperatures are about 5° C warmer. Fecundity and age at maturity for both species are similar. Between 60,000 and 300,000 eggs are produced per female; most individuals are sexually mature at age 4.

River herring have supported one of the oldest documented fisheries in North America. It was exclusively a U.S. inshore fishery until the late 1960s, when distant-water fleets began fishing for river herring off the Mid-Atlantic coast. Landings in this fishery peaked at over 24,000 mt in 1969 before declining to minimal levels in the late 1970s with implementation of the Fisheries Conservation and Management Act or FCMA. Intensification of this fishery was associated with declining abundance in U.S. river systems.

The principal fishing gears used to catch river herring are fish weirs, pound nets, and gill nets. Recreational fishing is minimal. The U.S. nominal catch (Gulf of Maine - Mid-Atlantic) averaged 25,000 mt annually between 1960 and 1969. Landings subsequently declined to an average of 4,000 to 5,000 mt until the mid-1980s; and more recently, to an average of about 500 mt from 1994-1998. Maine, North Carolina and Virginia typically account for more than 90 percent of total landings.

The dramatic decline in landings since the mid-1960s reflects substantial declines in resource abundance since that time, and several populations are still being exploited at higher than optimum levels. In addition, a great deal of historic spawning habitat remains unavailable. In response to the decline in landings and apparent resource conditions, the Atlantic States Marine Fisheries Commission (ASMFC) has prepared a comprehensive coastwide management plan for

shad and river herring, to facilitate cooperative management and restoration efforts between the states. At present, there is limited information available on which to base regulations, but additional data collected under provisions of the Plan should provide a better basis for understanding resource status and for regulatory actions.

### For further information

ASMFC [Atlantic States Marine Fisheries Commission]. 1999. Amendment 1 to the Interstate Fishery Management Plan for Shad & River Herring. ASMFC Fishery Management Report No. 35. 76 p.

Crecco, V.A. and M. Gibson. 1990. Stock assessment of river herring from selected Atlantic coast rivers. Atlantic States Marine Fisheries Commission, Washington, D.C. *ASMFC Spec. Rpt.* No. 19.

Street, M. And J. Davis. 1976. Notes on the river herring fishery of SA 6. ICNAF Res. Doc. 76/VI/61. 7p.

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### Summary Status

Long-term potential catch (MSY)	=	Unknown
Biomass corresponding to MSY	=	Unknown
Minimum biomass threshold	=	N/A
Stock Biomass in 1998	=	Unknown
$F_{MSY}$	=	Unknown
$F_{TARGET}$	=	N/A
Overfishing definition	=	None
$F_{1998}$	=	Unknown
Age at 50% maturity	=	2 to 4 years (varies by latitude)
Size at 50% maturity	=	28 cm (11.0 in.)
Assessment level	=	Index
Management	=	Interstate FMP for Shad and River Herring

**M = varies by latitude**

**$F_{0.1}$  = Variable**

**$F_{max}$  = Variable**

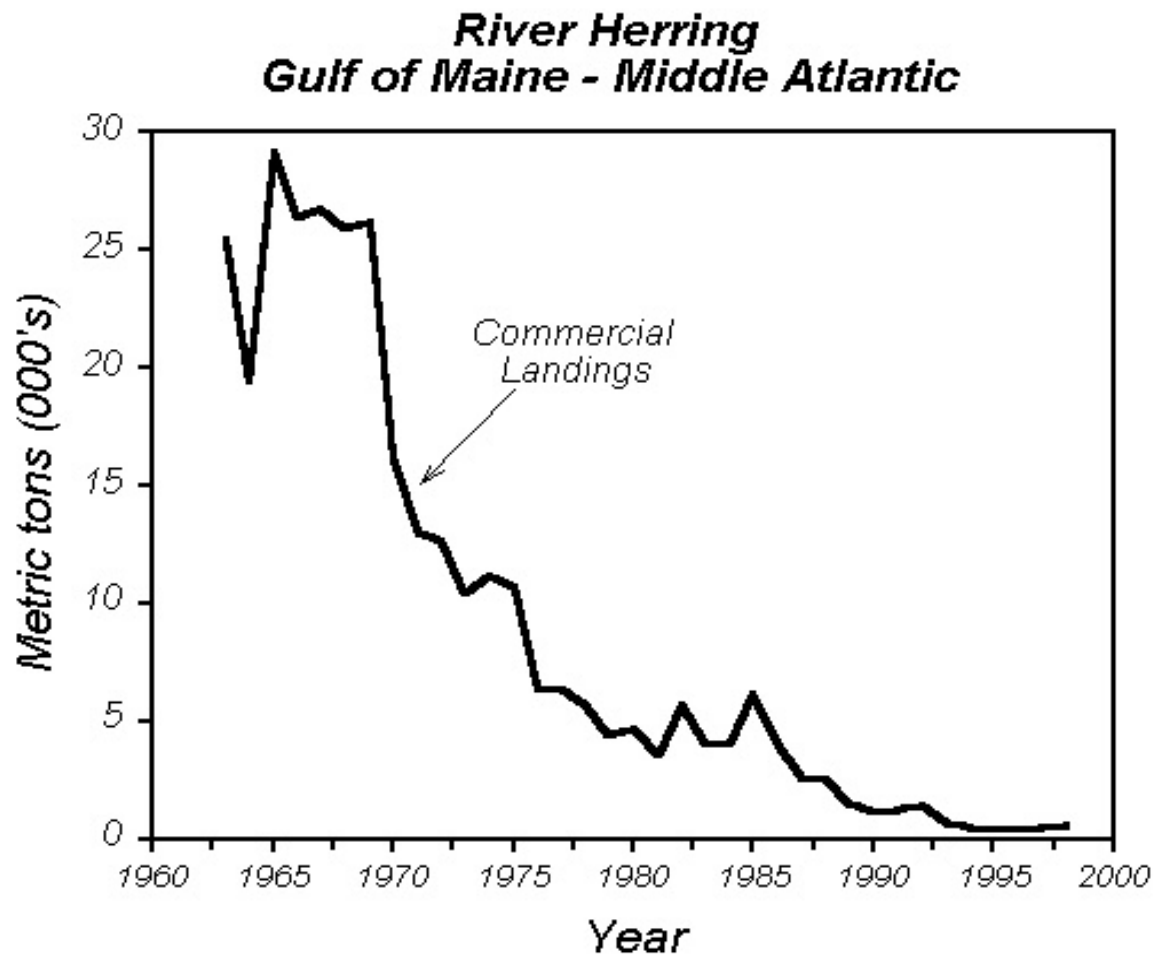


Table 34.1 Recreational catches and commercial landings (thousand metric tons)

Category	Year										
	1979-88 average	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
U.S. recreational	-	-	-	-	-	-	-	-	-	-	-
Commercial											
United States	4.2	1.5	1.2	1.3	1.5	0.8	0.6	0.5	0.5	0.5	0.6
Canada	-	-	-	-	-	-	-	-	-	-	-
Other	<0.1	-	-	-	-	-	-	-	-	-	-
Total nominal catch	4.2	1.5	1.2	1.3	1.5	0.8	0.6	0.5	0.5	0.5	0.6